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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/533,471

03/23/2000

David Randolph Smith

TH-1354(US)

9903

7590

06/15/2004

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EXAMINER

THOMAS, COURTNEY D

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/533,471	Applicant(s) SMITH, DAVID RANDOLPH	
	Examiner Courtney Thomas	Art Unit 2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-7 and 10-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-7 and 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/20/04</u> . | 6) <input type="checkbox"/> Other: _____ |

0DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5.20.04 has been entered.

Drawings

2. The drawings were received on 2.23.04. These drawings are acceptable.

Response to Arguments

3. Applicant's arguments with respect to amended claims 1, 3, 5-7 and 10-12 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

4. Claims 3 and 10-12 are objected to because of the following informalities:

5. Claim 3 is dependent on a cancelled claim 2. For purposes of examination, Examiner treats claim 3 as being dependent on independent claim 1.

6. Claim 3, line 2, recites: "...attached to said electrical wire ..." Examiner notes that independent claim 1 recites two instances of an electrical wire (see claim 1, lines 4 and 8).

7. Claim 3, line 3 recites: "... means for measuring data..." Examiner notes that this claimed element has been deleted (see claim 3, lines 1-2). Examiner suggests that the "means for measuring data" be replaced with "fiber optical cable" to maintain consistency throughout the claim.

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8. Claim 10, lines 5 and 6 recite: "optic fiber." Examiner suggests this term be replaced with "fiber optical cable" to maintain consistency throughout the claims (see also independent claims 1 and 5).
9. Claim 11 as best understood, appears redundant and does not seem further limit independent claim 10. (contrast claim 10, lines 5-6 with claim 10, lines 1-2).
10. Claim 12 lines 1-3 recite: "means for measuring data." This element is not recited in dependent claim 11.
11. Appropriate correction is required.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. In particular, Claim 1, line 1 is directed to a process for measuring and monitoring motor systems. Examiner notes that there are no recited steps directed to measuring and monitoring.
14. Claims 1 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, Claim 1, line 1 is directed to a process for measuring and monitoring motor systems. The body of claim 1 recites a structure wherein elements are used to collect and transfer data. Claim 1, however, ambiguously recites a step of "collecting data." It is unclear what "data" is collected and more importantly, it is unclear whether the recited structure

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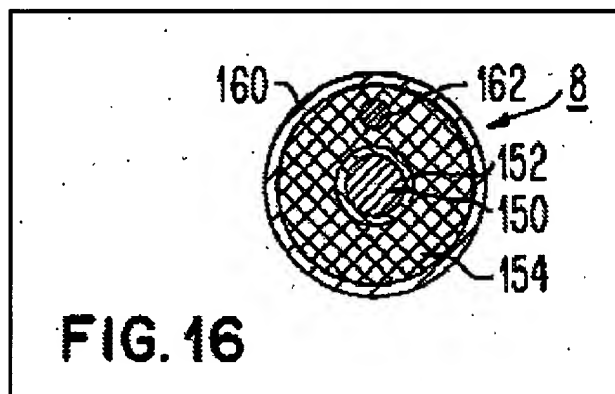
influences the type of “data” collected (i.e. is data collected from the motor system recited in claim 1, line 3). Examiner further notes that it is unclear how the collected data is transferred to a data collection station, as there is no recited element with the functionality of data transfer.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1, 3, 5-7, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sichling et al. (U.S. Patent 4,379,226).



17.

Figure 16 – U.S. Patent 4,379,226 to Sichling et al.

18. As per claims 1, 3, 5-7 and 10-12, Sichling et al. disclose a process (and apparatus) comprising the steps of incorporating a fiber optic cable (150) with at least one electrical wire (162), the optical fiber provided with at least one physical parameter sensor (30 not shown above) and is embedded in an electrical insulation coating (154) surrounding the at least one electrical wire (162) – (see also column 2, lines 23-39); collecting data with the at least one fiber

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optical cable and transferring the collected data to a collection station (i.e. **30**, not shown above; see also Abstract, column 2, lines 23-51 and corresponding Figures).

19. Sichling et al. do not explicitly disclose a process comprising the step of providing a motor system having at least one component selected from a stator and an armature, the at least one component connected to at least one electrical wire.

20. Sichling et al. teach however the incorporation of a sensor within motor systems such as in automotive applications (column 2, lines 45-47). Sichling et al. also suggest the measuring of a physical parameter through the incorporation of fiber optical signal transmission concepts (column 1, lines 20-25).

21. It would have been obvious to modify the process (and apparatus) of Sichling et al. such that it incorporated the step of providing a motor system having at least one component selected from a stator and an armature, the at least one component connected to at least one electrical wire. One would have been motivated to make such a modification for the purpose of measuring a physical parameter within a motor system as well as providing electrical power to the sensing components as suggested by Sichling et al. (column 2, lines 23-51; column 9, lines 56-66, column 10, lines 1-8).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney Thomas whose telephone number is (571) 272-2496. The examiner can normally be reached on M - F (9 am - 5 pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272 2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CT
Courtney Thomas


EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER